REMARKS

Applicants thank the Examiner for examining the application. The Examiner indicated, on the Summary page of the Office Action, that claims 2, 8-9, 15, 18, 20-22, and 26-27 are objected to, as opposed to being rejected. The Examiner said nothing further regarding these claims. The Examiner did not indicate any reason why the subject matter of these claims would be considered to be allowable over the prior art. However, the Examiner also did not reject any of these claims under § 112, § 101, § 102, or § 103. Thus, Applicants believe that the Examiner has deemed these claims to be allowable, if rewritten in independent form including the limitations of the base claim and any intervening claims. Applicants thank the Examiner for this, but decline to so amend these claims at this time. Should Applicants later choose to amend these claims to make them allowable, the amendments will encompass the independent claims and intervening base claims as filed, except for any non-substantive changes made thereto (i.e, amendments made due to typographical error, an objection, or a rejection due to form under 35 U.S.C. § 112).

Applicants also note that, while the Office Action Summary page indicates that claims 23 and 24 have been rejected, the Examiner indicates only that claims 23 and 24 are objected to only under § 112 ¶ 1, and not under § 102 or § 103. Applicants therefore believe that, should the rejection under § 112 ¶ 1 be traversed, claims 23 and 24 would be allowable. As this is not clear, Applicants respectfully request clarification on the status of claims 23 and 24.

Applicants have amended claims 1, 10, 11, 13, 19, and 21, as discussed herein. Applicants have also amended claims 14, 23, and 24 to correct a typographical error, as further discussed herein. Applicants have also submitted replacement sheets for Figures 2 and 3, and amended the specification correspondingly, as is discussed further below (under the section heading *Drawings*). With these amendments, claims 1-27 are now pending.

<u>*Claim Rejections – 35 U.S.C. § 112 ¶1*</u>

The Examiner rejected claims 10, 12, 14-18, and 23-24 under 35 U.S.C. § 112, ¶ 1, as failing to comply with the written description requirement.

Regarding claim 10, the Examiner indicates that page 15 "lines 64-65" (which Applicants believe the Examiner to be paragraphs 64 and 65) do not teach "if the primary content engine sender is inactive, sending a multicasting message to the plurality of content engine receives [sic] in response to the negative acknowledgement message." The Examiner is correct that paragraphs 64 and 65 do not teach this. However, the limitation is taught at least on page 8, lines 16-18; page 11, lines 21-23; and page 15, lines 6-12, which specifically teach the step 510 as performing the process of Figure 4. Thus, the rejection is traversed, and claim 10 does comply with the written description requirement.

Regarding claim 12, the Examiner indicates that Figure 4 and elements 400 and 405 do not seem to show the limitation of "means for if a negative acknowledgment message from at least one of the plurality of content engine receivers is received before expiration of a predetermined period, then resending the multicast message a predetermined number of times". Applicants respectfully submit that this limitation is shown at least in Figure 4, element 410 *et seq*. and is also described in the specification at least at pages 13-14. Thus, the rejection is traversed, and claim 12 does comply with the written description requirement.

Regarding claims 14, 23, and 24, the Examiner indicates that there is no written description given for the limitations "network interface" and "connection circuitry coupled to the network interface". Applicants respectfully submit that the limitation regarding "an connection circuitry" [sic] in each of these claims contained a typographical error, and that the claims should read as "an interconnection mechanism". Further, Applicants respectfully submit that support for this, and written description of these limitations, may be found in the specification at least at page 17 lines 1-14. Thus, the rejection is traversed, and claims 14, 23, and 24 do comply with the written description requirement.

Drawings

The Examiner objected to the drawings because of minor informalities, namely, according to the Examiner, certain limitations of claims 10, 12, 14, 23, and 24 are not shown in the drawings.

Applicants respectfully refer the Examiner to the discussion of the § 112 ¶ 1 rejection above, in which Applicants believe they indicate where in the drawings it is possible to find all of the limitations the Examiner refers to, regarding claims 10 and 12. Thus, Applicants have not submitted corrected drawing sheets at this time for these claims. Should the Examiner disagree with this, Applicants respectfully request that the Examiner contact Applicants' Attorney at the telephone number provided below to discuss the drawings.

However, regarding claims 14, 23, and 24, Applicants submit that the elements "network interface" and "an interconnection mechanism coupling the processor, the memory and the network interface" are not found anywhere in the Figures. Therefore, Applicants have submitted herewith replacement sheets for Figures 2 and 3, which now properly show both a network interface and an interconnection mechanism coupling the processor (i.e., controller 200/300), the memory (205/305), and the network interface. Applicants have also amended the specification to indicate the location of the new elements. Support for the amendment to the drawings and to the specification may be found at least at page 17, lines 1-14.

Claim Rejections – 35 U.S.C. § 101

The Examiner rejected claim 13 under 35 U.S.C. § 101 because the invention is directed non-statutory subject matter. Specifically, the Examiner objected to the phrasing of the preamble of claim 13. Applicants have amended the preamble of claim 13 to read as follows: "A computer program product, stored on computer-readable medium, including computer program logic that, when executed in a processor of a computer system, directs the computer system to perform operations of:"

Applicants believe this language to be acceptable, however, should the Examiner disagree, Applicants respectfully request that the Examiner contact Applicants' Attorney at the telephone number provided below to discuss the claim language.

<u>*Claim Objections*</u>

The Examiner objected to claims 1, 10, and 11 because of informalities, namely the wording of the claim being, according to the Examiner, a computerized device performing a method. Applicants respectfully disagree with the Examiner's characterization of these claims. Claims 1 and 10 previously stated: "In a computerized device, a method of" – in other words, indicating that the method occurred in a computerized device. (Claim 11 included further language concerning the computerized device, but was otherwise similar.) To clarify this point, Applicants have amended claims 1, 10, and 11. Claim 1 is illustrative, and now reads as: "A method for distributing content in a content distribution network, the method occurring in a computerized device, the method comprising the steps of:". Applicants believe this language to be acceptable, however, should the Examiner disagree, Applicants respectfully request that the Examiner contact Applicants' Attorney at the telephone number provided below to discuss the claim language.

The Examiner also objected to claims 19-22 because of informalities, namely the reference to a computerized device in claims when they refer back to a method, and then the claims all refer to logic in those method claims. Applicants believe this rejection has arisen out of two typographical errors, one in claim 19 (from which claim 20 depends), and one in claim 21 (from which claim 22 depends). The typographical errors resulted in claims 19 and 21, respectively, referring back to claim 1 (a method claim), instead of properly referring back to claim 14 (a computerized device claim). Applicants have thus amended claims 19 and 21 to correct the typographical errors, rendering the objection moot.

<u>*Claim Rejections – 35 U.S.C. § 102(b)*</u>

The Examiner rejected claims 1, 3, 4, 6, 12-14, 16-17, 19, and 25 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,247,059 to Johnson et al.

Applicants' independent claim 1 requires, among other things, sending a multicast message to a plurality of content engine receivers, the multicast message including content to be distributed among the plurality of content engine receivers. The Examiner cites (according to Page 5 of the Office Action) to nodes 12 and col. 6 lines 9-51 and col. 5 lines 63 to col. 6 line 7 as disclosing this limitation. More specifically, the Examiner states that "the multicast message has **inherent content** per" the cited columns and lines listed above (Office Action Page 5; emphasis added).

With all due respect to the Examiner, as the Examiner knows, when making a rejection under 35 U.S.C. § 102(b), what is inherent in a reference is meaningless; all that matters is what the reference actually discloses. Putting aside for the moment what Johnson et al. does actually disclose, by the Examiner's own admission, Johnson et al. does not actually disclose a multicast message including content to be distributed among the plurality of content engine receivers, as required by Applicants' independent claim 1, else the Examiner would not have need to say that the multicast message disclosed by Johnson et al. has "inherent" content. For this reason alone, Applicants' independent claim 1 is not disclosed by Johnson et al., and thus is allowable over Johnson et al.

Moving to the issue of what Johnson et al. does disclose, according to Johnson et al., the data included in a multicast message is summarized in col. 6 lines 14-32, and is shown clearly in Fig. 3C. All of this data is concerned solely with the message header (element 34a in Fig. 3B); none of it is concerned with the message data (i.e. payload) (element 34b in Fig. 3B). That is, at no point does Johnson et al. actually disclose that a multicast message is sent to a plurality of content engine receivers, the multicast message including content to be distributed among the plurality of content engine receivers, as required by Applicants' independent claim 1. Indeed, on the topic of what content a multicast message disclosed in Johnson et al. contains, Johnson et al. is silent, and does not teach or even suggest what the content might be. Certainly

Johnson et al. makes no suggestion whatsoever that the content may by content to be distributed among a plurality of content engine receives, as required by Applicants' independent claim 1. For any of these reasons, Johnson et al. does not disclose Applicants' independent claim 1, and thus Applicants' independent claim 1 is allowable over Johnson et al.

Further, Applicants' independent claim 1 also requires, among other things, if a negative acknowledgment message from at least one of the plurality of content engine receivers is received before expiration of a predetermined period, then resending the multicast message a predetermined number of times. The Examiner cited to col. 6 lines 9-51 and col. 6 line 52-col. 7 line 22 as disclosing this limitation.

However, the cited sections on Johnson et al. make clear that the message re-sent according to Johnson et al. is sent as a point-to-point message transmission; *see at least* col. 6 lines 43-45 and col. 7 lines 1-5. A point-to-point message transmission is not a multicast message, as required by Applicants' independent claim 1. Applicants note that, one may broadly read the language of this particular limitation to say that the limitation is silent on the matter of how the message is re-sent, as all the claim says is "resending" – in which case, a unicast resending, as is disclosed by Johnson et al., would anticipate the limitation. However, Applicants do not subscribe to such a reading of the limitation. Applicants note that, throughout the claims, when the method of transmission is to be unicast, the claims specifically require that a unicast message be sent, and indeed use that phrase, "unicast message"; *see at least* claims 2, 3, 15, 16, 26, and 27. For every other message that is to be sent or otherwise transmitted according to the claims, the claims specifically use the phrase "multicast message", which suggests to Applicants that the limitation is limited to multicast transmissions anytime the phrase "multicast message" is used. Therefore, under this reading of Applicants' claims, Applicants' independent claim 1 is thus requiring that the re-sent message by re-sent by multicast transmission, in contrast to the unicast re-transmission that is disclosed by Johnson et al. Such a reading of the claims is further supported, in addition to by the claims themselves, by Applicants' specification, which states at least at paragraph 38 on page 11:

> The primary content engine sender 110 resends the multicast message 145 a predetermined number of times. **If after the predetermined number of multicast resends** is exhausted and the content engine receiver 120 still has not received the content, the primary content engine sender 110 transmits a unicast message 150 including missing content to the content engine receiver 120.

(emphasis added). Thus, for these reasons alone, Applicants' independent claim 1 is not disclosed by Johnson et al., and therefore Applicants' independent claim 1 is allowable over Johnson et al.

Applicants' independent claims 12-14 and 25 all include limitations similar to those of Applicants' allowable independent claim 1. Therefore, for at least the reason(s) given above with regards to Applicants' allowable independent claim 1, Applicants' independent claims 12-14 and 25 are themselves not disclosed by Johnson et al., and thus, Applicants' independent claims 12-14 and 25 are allowable over Johnson et al..

Applicants' dependent claims 3, 4, 6, 16-17, and 19, depend from, respectively, Applicants' allowable independent claims 1 and 14. Therefore, for at least the reason(s) given above with regards to Applicants' allowable independent claims 1 and 14, Applicants' dependent claims 3, 4, 6, 16-17, and 19 are themselves not disclosed by Johnson et al., and thus, Applicants' dependent claims 3, 4, 6, 16-17, and 19 are allowable over Johnson et al..

Further, regarding Applicants' dependent claim 3, the Examiner makes the same erroneous statement about what Johnson et al. actually discloses as was made in regards to Applicants' independent claim 1. That is, the Examiner states, when discussing claim 3, that "Sending node 12 measures the period until timer times out and **could** receive a NAK after the time out" (Office Action page 5; emphasis added). Applicants again respectfully submit that, while from a theoretical point of view, the Examiner is correct, the sending node 12 could receive a NAK after the time out, at no point does Johnson et al. **actually disclose** (as is required by a rejection under § 102(b)) that the sending node does receive a NAK after the time out, as is required by Applicants' dependent claim 3 ("receiving a negative acknowledgment message from

one of the plurality of content engine receivers after the predetermined period has expired"). Indeed, it seems quite clear to Applicants that Johnson et al. does not even suggest such an event occurs. Thus, for this reason alone, Applicants' dependent claim 3 is not disclosed by Johnson et al., and is itself allowable over Johnson et al.

CONCLUSION

Applicants believe this Amendment and Response to be fully responsive to the present Office Action. Thus, based on the foregoing Remarks, Applicants respectfully submit that this application is in condition for allowance. Accordingly, Applicants request allowance of the application.

Applicants hereby petition for any extension of time required to maintain the pendency of this case. If there is any fee occasioned by this response that is not paid, please charge any deficiency to Deposit Account No. 50-3735.

Should the enclosed papers or fees be considered incomplete, Applicants respectfully request that the Patent Office contact the undersigned collect at the telephone number provided below.

Applicants invite the Examiner to contact the Applicants' undersigned Attorney if any issues are deemed to remain prior to allowance.

Respectfully submitted,

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